§58.808

same general requirements for materials and construction as outlined in §§ 58.128 and 58.215 through 58.230 as applicable, except for the following:

- (a) Modified Whey Products. Equipment for whey fractionation, such as ultrafiltration, reverse osmosis, gel filtration, and electrodialysis shall be constructed in accordance with 3-A sanitary design principles, except where engineering requirements preclude strict adherence to such standards. Materials used for product contact surfaces shall meet applicable 3-A Sanitary Standards or Food and Drug Administration requirements. A11 equipment shall be of sanitary construction and readily cleanable.
- (b) Lactose. Equipment used in the further processing of lactose following its separation from whey shall have smooth surfaces, be cleanable, free from cracks or crevices, readily accessible for inspection and shall be constructed of non-toxic material meeting applicable Food and Drug Administration requirements and under conditions of use shall be resistant to corrosion, pitting or flaking. [The use of stainless steel is optional.]

QUALITY SPECIFICATIONS FOR RAW MATERIALS

§ 58.808 Whey.

Whey for processing shall be fresh and originate from the processing of products made from milk meeting the requirements as outlined in §\$58.132 through 58.138. Only those ingredients approved by the Food and Drug Administration may be added to the whey for processing, except when restricted by this subpart. Whey products to which approved ingredients have been added or constituents removed to alter original characteristics for processing or usage shall be labeled to meet the applicable requirements.

OPERATIONS AND OPERATING PROCEDURES

§58.809 Pasteurization.

(a) All fluid whey used in the manufacture of dry whey, dry whey products, modified whey products, and lactose shall be pasteurized prior to condensing. When the condensing and dry-

ing operations for dry whey take place at the same plant, the pasteurization may be located at a different point in the operation provided it will protect the quality of the finished product and not adversely affect the processing procedure.

- (b) Pasteurized products transported to another plant for final processing shall be repasteurized, except that condensed whey containing 40 percent or more solids may be transported to another plant for further processing into dry whey, dry whey products or lactose without repasteurization.
- (c) If whey is transferred to another plant for further processing, or if during the processing procedure unpasteurized ingredients are added (except those necessary for lactose crystallization), or processing procedures permit contamination or bacterial growth, the whey shall be repasteurized as close to the final drying operations as possible.

§58.810 Temperature requirements.

- (a) Unless processed within 2 hours, all whey or condensed whey, except acid type whey with a titratable acidity of 0.40 percent or above, or a pH of 4.6 or below, shall be cooled to 45 °F or less, or heated to 145 °F or higher. Other temperatures may be used when essential for the technology of the process, such as lactose crystallization and membrane whey separation processes, when the quality and wholesomeness of the product is not impaired.
- (b) Recording thermometers shall be required and so located to assure that the cooling or heating requirements in paragraph (a) of this section are met.

§58.811 General.

The operating procedures as contained in §\$58.237 through 58.244, 58.246, 58.247, and 58.443 (a) and (b) shall be followed as applicable.

§ 58.812 Methods of sample analysis.

Samples shall be tested according to the applicable methods of laboratory analysis contained in either DA Instruction 918-RL, as issued by the USDA, Agricultural Marketing Service, Dairy Programs, or the Official Methods of Analysis of the Association of Official Analytical Chemists, or